

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
MIDLAND DIVISION**

TRUE CHEMICAL SOLUTIONS, LLC,
Plaintiff

-v.-

**PERFORMANCE CHEMICAL
COMPANY,**
Defendant

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MO-18-CV-00078-ADA

CLAIM CONSTRUCTION ORDER

Before the Court are the parties’ claim construction briefs: Defendant / patentee Performance Chemical Company’s (“PCC”) opening brief (ECF No. 47), Plaintiff/ alleged infringer True Chemical Solutions’ (“True Chem”) responsive brief (ECF No. 55), PCC’s reply brief (ECF No. 56), and True Chem’s sur-reply brief (ECF No. 57). The Court held the *Markman* hearing on August 12, 2019. During that hearing, the Court informed the Parties of the constructions it intended to provide. This Order does not alter any of those constructions.

I. Background

True Chem filed this declaratory judgment lawsuit against PCC requesting a judgment of non-infringement and invalidity regarding U.S. Patent No. 9,834,452 on April 27, 2018. ECF No. 1. PCC alleges infringement of the ’452 Patent and U.S. Patent No. 10,011,501. ECF Nos. 9 and 25. True Chem denies infringement and requests a judgment of invalidity for each claim of the ’452 and ’501 Patents. ECF No. 39.

The ’501 Patent is a continuation of the ’452 Patent. Both patents are entitled “Automated water treatment trailer for processing multiple fluids simultaneously.” The

patents are directed towards an “automated water treatment trailer for automatically processing multiple fluids simultaneously wherein each fluid has fluid characteristics and specific gravity.” ’452 Patent at 1:17-19. The patents-in-suit are “directed to providing the water and chemical portions of the fracking materials.” ECF No. 55 at 5. The composition of fracking materials varies substantially. *Id.* The trailer described in the patents-in-suit has suction ports on one side (to intake fracking-related chemicals) and discharge ports on the other side. ’452 Patent at 3:22-39. The discharge ports are connected to a back pressure valve which is connected to another valve which is connected to a manifold which is connected to a water pipe. *Id.* at Fig. 1. The back pressure valves regulate pressure between the valves and the discharge ports. *Id.* The water pipe is used to supply the fracking materials into the wellbore. ECF No. 55 at 6.

The patents-in-suit also recite using a controller to remotely control the pumps within the trailer that pump chemicals into the suction ports. ’452 Patent at 7:17–22. The trailer also includes pressure gauges which measure the pressure flowing to a pump and communicates that information to a controller. *Id.* at 2:46–49. The mixed chemicals enter the water pipe, thus treating the water in the water pipe to produce a desired fracking fluid.

II. Legal Principles

A. Claim Construction Principles Generally

The general rule is that claim terms are generally given their plain and ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”) (vacated on other grounds). The plain and ordinary meaning of a

term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Philips*, 415 F.3d at 1313.

“Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)). “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

Although extrinsic evidence can also be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent. *Id.* at 1318. Expert testimony also may be helpful, but an expert’s conclusory or unsupported assertions as to the meaning of a term are not. *Id.*

The “only two exceptions to [the] general rule” that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must “clearly set forth

a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Id.* at 1365. To disavow the full scope of a claim term, the patentee’s statements in the specification or prosecution history must represent “a clear disavowal of claim scope.” *Id.* at 1366. Accordingly, when “an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

B. Claim Construction Principles Regarding Means-Plus-Function Claims

Section 112, ¶ 6¹ provides that a structure may be claimed as a “means ... for performing a specified function” and that an act may be claimed as a “step for performing a specified function.” *Masco Corp. v. United States*, 303 F.3d 1316, 1326 (Fed. Cir. 2002). There is a rebuttable presumption that § 112, ¶ 6 applies when the claim language includes “means” or “step for” terms, and that it does not apply in the absence of those terms. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015). “When a claim term lacks the word ‘means,’ the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Id.* at 1349 (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)).

Section 112, ¶ 6 limits the scope of the functional term “to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson*, 792 F.3d at 1347. Construing a means-plus-function claim is a two-step process. First, courts determine the function of the means-plus-function limitation. *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311

¹ The AIA version of 112, ¶ 6 is 112(f), which has no substantial differences as compared to 112, ¶ 6.

(Fed. Cir. 2001). Second, courts determine “the corresponding structure disclosed in the specification and equivalents thereof.” *Id.* The structure disclosed in the specification is “corresponding” structure only if “the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Id.* The corresponding structure “must include all structure that actually performs the recited function.” *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005).

C. Indefiniteness

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2.² A claim, when viewed in light of the intrinsic evidence, must “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). If it does not, the claim is therefore invalid as indefinite. *Id.* at 901. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application for the patent was filed. *Id.* at 911. “Indefiniteness must be proven by clear and convincing evidence.” *Sonix Tech. Co., Ltd. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

In the context of a claim governed by 35 U.S.C. § 112, ¶ 6, the claim is invalid as indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed function. *Williamson*, 792 F.3d at 1351–52. The disclosure is inadequate when one of ordinary skill in the art “would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim.” *Id.* at 1352.

² The AIA version of 112, ¶ 2 is 112(b), which has no substantial differences as compared to 112, ¶ 2.

III. Analysis

A. Term 1: “frame” (’452 Patent, Claim 1; ’501 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
A rigid structure formed of relatively slender pieces, joined so as to surround sizable empty spaces or nonstructural panels, and used as a major support in a trailer.	A rigid structure formed of relatively slender pieces, joined so as to surround sizable empty spaces or nonstructural panels, and generally used as a major support in building or engineering works, machinery, furniture, <i>etc.</i>

The parties’ proposed constructions agree on the first portion (“A rigid structure formed of relatively slender pieces, joined so as to surround sizable empty spaces or nonstructural panels”), but disagree on the latter portion. But at the *Markman* hearing, PCC’s counsel agreed to True Chem’s construction. Hrg. Tr. (Rough) at 5:15–17. Therefore, the Court determines that the proper construction for “frame” is “a rigid structure formed of relatively slender pieces, joined so as to surround sizable empty spaces or nonstructural panels, and used as a major support in a trailer.” The Court notes that this construction appears to be consistent with the plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

B. Term 2: “tongue” (’452 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
A rigid structure at an end portion of the trailer and connecting the frame to the hitch	A device affixed to the frame that is capable of connecting with a mating device on the towing vehicle to permit towing.

The parties’ constructions, in substance, differ with respect to whether the construction for “tongue” needs to include the words “mating device.” *Id.* at 8:16–18. PCC contends that including the words “mating device” helps the jury. *Id.* at 9:1–8. True Chem, however, contends that the meaning of “mating device” is unclear and because it

does not appear in the specification, its meaning in the context of the patent cannot be ascertained. *Id.* at 9:24–10:4. But later in the hearing, PCC conceded that the inclusion of “mating device” into the construction was not necessary. *Id.* at 12:4–6.

Based on the above, the Court determines that the proper construction for “tongue” is “a rigid structure at an end portion of the trailer and connecting the frame to the hitch to permit towing.” The Court notes that this construction appears to be consistent with the plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

C. Term 3: “[a plurality of] discharge port[s]” (’452 Patent, Claim 1; ’501 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
An opening in a fluid system for exhaust of a fluid from that system”	Two or more ports mounted in one of the walls for discharge of a fluid.

As an initial matter, True Chem’s proposed construction is directed towards “discharge ports” while PCC’s proposed construction is directed to “a plurality of discharge ports.” With that understanding, PCC’s construction for “discharge port” appears to be “a port mounted in one of the walls for a discharge of fluid.”

PCC’s proposed construction suffers from at least two flaws. First, to the extent that a construction for “port” is necessary, PCC’s proposed construction simply reuses the word “port.” By contrast, True Chem’s proposed construction for “port” is “an opening in a fluid system,” which is consistent with how the specification uses it. *See, e.g.*, ’452 Patent at 10:4-6 (“Two pumps mounted in the enclosure and connected in parallel, pull chemical from the chemical totes and flow the chemical to the plurality of discharge ports simultaneously.”).

Second, rather than describing what a “port” is, PCC’s proposed construction merely describes the location of a port, namely, that it is “mounted in one of the walls.”

While that is consistent with the specification, it still does not give meaning to “port. Additionally, it creates redundancy in the claim. For example, substituting in PCC’s proposed construction for “a plurality of discharge ports” in Claim 1, Limitation [f] of the ’452 Patent yields the following limitation: “[two or more ports mounted in one of the walls for discharge of a fluid] mounted in one of the connected walls.” Creating such a redundancy in a claim limitation is not helpful to the jury. *Kroy IP Holdings, LLC v. Safeway, Inc.*, No. 2:12-cv-800-WCB, d2014 WL 3735222, at *2 (E.D. Tex., July 28, 2014).

True Chem’s construction uses the word “exhaust” to give meaning to “discharge” based on a dictionary definition. ECF No. 55 at 13. PCC contends that “discharge” is sufficiently clear to a jury. Hrg. Tr. (Rough) at 14:10–13. The Court agrees with PCC.

But other than the use of “exhaust,” the Court otherwise finds that True Chem’s construction for “discharge ports” is consistent with the specification. *See, e.g.*, ’452 Patent at 10:4-6.

Therefore, with the simple substitution of “discharge” for “exhaust” in True Chem’s construction, the Court determines that the proper construction for “discharge port” is “an opening in a fluid system for discharge of a fluid from that system.” The Court notes that this construction appears to be consistent with the plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

D. Term 4: “[a plurality of] suction port[s]” (’452 Patent, Claim 1; ’501 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
An opening in a fluid system for ingress or entry of a fluid into that system”	Two or more ports for intake of a fluid from a chemical container or tote and mounted in one of the walls

As an initial matter, True Chem’s proposed construction is directed towards “suction ports” while PCC’s proposed construction is directed to “a plurality of suction ports.” With that understanding, PCC’s construction for “suction port” appears to be “a port for intake of a fluid from a chemical container or tote and mounted in one of the walls.”

PCC’s proposed construction for “suction ports” suffers from the same issues as its proposed construction for “discharge ports.”

Because “ingress” or “entry” in True Chem’s proposed construction adequately construe “suction”—and also because PCC did not object to the use of these words (*see, e.g.*, ECF No. 56 at 3; Hrg. Tr. (Rough) at 16:5-7, 13), the Court determines that the proper construction for “suction port” is “an opening in a fluid system for ingress or entry of a fluid into that system.” The Court notes that this construction appears to be consistent with the plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

E. Term 5: “manifold” (’452 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
A structure that has a main chamber coupled to a plurality of input ports that are in fluid communication with the discharge ports	A pipe mounted to a water pipe having several lateral outlets attached to discharge ports to control fluid flow.

Although they use different words, the parties’ proposed constructions differ in only two respects. First, the parties differ whether a manifold is a “structure” as proposed by True Chem or a “pipe” as proposed by PCC. Second, the parties differ whether the manifold “control[s] fluid flow.”

At the hearing, PCC conceded that “structure” includes “pipe.” Hrg. Tr. (Rough) at 23:8-11. PCC also conceded that “control fluid flow” was not needed. *Id.* at 26:15-16. With those concessions, PCC then agreed that True Chem’s proposed construction

“encompass[ed] everything” in PCC’s proposed construction. *Id.* at 26:17-22. Therefore, the Court determines that the proper construction for “manifold” is “a structure that has a main chamber coupled to a plurality of input ports that are in fluid communication with the discharge ports.” The Court notes that this construction appears to be consistent with the plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

F. Term 6: “Charging port” (’452 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
An outlet from which a charging current is supplied to a battery operated device	A device providing energy to a removable client device such as a cell phone, a laptop or similar device

Although they use different words, the parties’ proposed constructions differ only with respect to the necessity of including examples of devices that could be attached to the charging port. In particular, PCC’s construction proffers specific examples of client devices including, but not limited to, “a cell phone, a laptop or similar device.”

The primary problem with PCC’s proposed construction is that if “cell phone” or “laptop” are merely exemplary, then including exemplary devices unnecessarily lengthens the construction for this term without changing the claim scope. *Id.* at 19:9-20. Therefore, because those additional exemplary devices are unnecessary, the Court determines that the proper construction for “charging port” is “an outlet from which a charging current is supplied to a battery operated device.” The Court notes that this construction appears to be consistent with the plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

G. Term 7: “controller in communication with each pump” (’452 Patent, Claim 1; ’501 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
“Controller” is means plus function term under 35 U.S.C. 112(f)	A device that controls another device connected to each pump and to at least one tablet, telephone or computer thereby permitting the client the possibility to monitor and/or control the pumps

True Chem contends that “controller” is as a means-plus-function term while PCC contends otherwise. True Chem then contends that if Section 112(f) applies to “controller,” then it is indefinite because it lacks an algorithm to perform the function. *See, e.g.*, ECF No. 57 at 12, Hrg. Tr. (Rough) at 40:1–10.

As described above, there is a presumption that Section 112(f) does not apply when the word “means” (or another similar word) does not appear. *Williamson*, 792 F.3d at 1348. In this case, a person of ordinary skill in the art (“POSITA”) would not understand that “controller” was written in means-plus-function language. To a POSITA with a background in electrical engineering, a controller is a well-known and well-understood term that refers to an electrical device (*e.g.*, system-on-a-chip (“SoC”) or application-specific integrated circuit (“ASIC”)) that controls the operation of other components in the system. In this case, a POSITA would understand that the controller is the key component to permit the automation of “different fluid flows at remotely controllable pressures using fluid characteristics and specific gravity and pressure in the water pipe.” ’452 Patent at 7:55–57. Furthermore, a POSITA would understand that the controller permits the user to remotely control the operation of the trailer. *Id.* at 7:17–19.

To accomplish that, the specification describes that the controller is connected to the pumps. *See, e.g., id.* at 1:39–41. The specification also describes that the controller

receives information regarding pressure at each pump. *See, e.g., id.* at 10:11–13. The specification further describes that the controller bi-directionally connects to a network, which in turn connects to one or more client devices. *See, e.g., id.* at 8:39–41; *see also id.* at 10:7–10. The network connection may be wireless. *See, e.g., id.* at 8:35–38. A bi-directional connection allows the user to receive information from the controller, *e.g.*, pressure for a specific pump which is pumping a chemical of a specific gravity, and send commands, as needed, to the pumps via the controller. By using a client device, the user can remotely control the operation of the pumps. *See, e.g., id.* at 7:53–57. A generator or other power supply provides electrical current to, *inter alia*, the controller. *See, e.g., id.* at 2:50–52.

A POSITA would understand that because the claims recite sufficient structure, the presumption that Section 112(f) does not apply stands. For example, in Claim 1 of the '452 Patent, Limitation [k] recites that the controller is in “communication with each pump” and “a network to communicate with at least one client device for remote monitoring and control.” Limitation [l] further recites that pressure gauges measuring the pressure at the output of each pump are also connected to the controller. '452 Patent at Cl. 1, Lim. [l]. Limitation [m] recites that a “power supply [is] electrically connected to ... the controller.” *Id.* at Cl. 1, Lim. [m].

In other words, based on the claim language, a POSITA would understand that the controller is not a generic computer, but rather is a chip that is equivalent to a SoC or ASIC which has the capability to: (1) Receive feedback from and control mechanical devices (pumps) and (2) Communicate with client devices over a network, possibly using wireless protocols. A POSITA would understand that the former capability requires that

the controller comprises hardware capable of interpreting data from a pressure gauge—which may use specific communications protocols (*e.g.*, analog)—and then send the appropriate commands back to the pump—which may require different (*e.g.*, digital) communications protocols. A POSITA would further understand that the latter capability requires that the controller comprises network communication hardware and, if wireless, the necessary security components (hardware and/or software) to ensure secure wireless communications. This understanding is consistent with the plain and ordinary meaning of controller.

Based on the above, the Court determines that the proper construction for “controller in communication with each pump” is not governed by Section 112(f) and bears its plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

H. Term 8: “[a plurality of] valve[s]” (’452 Patent, Claim 1; ’501 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
A device for halting or limiting the flow of a liquid	Two or more valves, one each attached to a plurality of suction ports that open, shut or partially obstruction one or more of the suction ports.

As an initial matter, True Chem’s proposed construction is directed towards “valve” while PCC’s proposed construction is directed to “a plurality of valves.”

During the hearing, the parties agreed that valve should be construed according to its plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

Hrg. Tr. (Rough) at 27:7, 28:12-19. The Court agrees that this is the proper construction.

I. Term 9: “back pressure valves” (’452 Patent, Claim 1); “back pressure control regulator” (’501 Patent, Claim 1)

True Chem’s Proposed Construction	PCC’s Proposed Construction
A device that maintains a defined pressure at its own inlet	Back pressure valve or regulator is attached to each first valve which are, in turn, attached to two or more suction ports to control the upstream pressure.

During the hearing, PCC conceded that True Chem’s proposed construction was “technically correct.” *Id.* at 35:1-4. But PCC contended that because the plain and ordinary meaning of this term was preferable to True Chem’s proposed construction as PCC’s construction would be less confusing to a jury. *Id.* at 33:23–34:9.

Because True Chem has not shown that patentees acted as their own lexicographer or disavowed the full scope of the claim term either in the specification or during prosecution, True Chem has not overcome the presumption that this term should be construed according to its plain and ordinary meaning. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Therefore, the Court determines that “back pressure valves” be given its plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it. Similarly, “back pressure control regulators” will be given its plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it.

J. Term 10: “control commands” (’501 Patent, Claim 5)

True Chem’s Proposed Construction	PCC’s Proposed Construction
Indefinite	A specific instruction given to a computer application to control a task or function

True Chem contends that “control commands” is indefinite for at least two reasons. First, True Chem contends that the term is indefinite because the patentees acted as their own lexicographer by coining the term “control commands,” but failing to provide a


definition for that term. ECF No. 57 at 6. Second, True Chem contends that the term is indefinite because the specification describes “both a controller and a remote control,” but does not describe which one “control commands” is associated with. *Id.*; *see also* ECF No. 55 at 6.

“Control commands” appears twice only in the ’501 Patent. ’501 Patent at 3:24–26 (“Each pump can comprise a pump motor, a pump controller with a display, and a plurality of control commands to regulate fluid flow through the pump.”), Cl. 5 (“The automated water treatment trailer of claim 1, wherein each pump comprises: a pump motor, a pump controller with a display, and a plurality of control commands in the pump controller to regulate fluid flow through the pump.”). In both instances, the ’501 Patent describes “control commands” as being within the pump controller. Because the controller is coupled to the pump controller (and because the client devices are coupled to the controller through the network), a POSITA would understand that the control commands are associated with the controller. As such, a POSITA would further understand that that the patentees were not coining a new term, but merely describing commands that the controller uses to control the pump. As such, the Court does not find any ambiguity in this term, let alone such that, when viewed in light of the intrinsic evidence, it does not “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus*, 572 U.S. at 910.

Based on the above, the Court determines that “control commands” is not indefinite and that PCC’s construction (“a specific instruction given to a computer application to a control a task or function”) is correct.

Finally, as stated during the hearing, the Court will take up any motions regarding lack of written description or non-enablement at the summary judgment stage of the case.

SIGNED this 25th day of September, 2019.



ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE